

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/550,525A  
Source: LPW  
Date Processed by STIC: 10/12/06

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314**

Revised 01/10/06

# Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/580,525A
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 _____ Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 _____ Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 _____ Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 _____ Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 _____ Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 _____ PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 _____ Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 _____ Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 _____ Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 _____ Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)	
11 _____ Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules	
12 _____ PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 _____ Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>	



IFWP

## RAW SEQUENCE LISTING

DATE: 10/12/2006

PATENT APPLICATION: US/10/550,525A

TIME: 09:36:42

Input Set : A:\Sequence listing.ST25.txt

Output Set: N:\CRF4\10122006\J550525A.raw

3 <110> APPLICANT: Emory University  
 5 <120> TITLE OF INVENTION: CXCR4 Antagonists and Methods of Their Use  
 7 <130> FILE REFERENCE: 50508-2331  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/550,525A  
 C--> 10 <141> CURRENT FILING DATE: 2005-09-22  
 12 <160> NUMBER OF SEQ ID NOS: 20  
 14 <170> SOFTWARE: PatentIn version 3.3  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 14  
 18 <212> TYPE: PRT  
 19 <213> ORGANISM: Artificial  
 21 <220> FEATURE:  
 22 <223> OTHER INFORMATION: sequence of T140  
 25 <220> FEATURE:  
 26 <221> NAME/KEY: MISC\_FEATURE  
 27 <222> LOCATION: (3)..(3)  
 28 <223> OTHER INFORMATION: X = Nal  
 30 <220> FEATURE:  
 31 <221> NAME/KEY: MISC\_FEATURE  
 32 <222> LOCATION: (8)..(8)  
 33 <223> OTHER INFORMATION: X = dLys  
 35 <220> FEATURE:  
 36 <221> NAME/KEY: MISC\_FEATURE  
 37 <222> LOCATION: (12)..(12)  
 38 <223> OTHER INFORMATION: X = Cit  
 40 <400> SEQUENCE: 1  
 W--> 42 Arg Arg Xaa Cys Tyr Arg Lys Xaa Pro Tyr Arg Xaa Cys Arg  
 43 1 5 10  
 46 <210> SEQ ID NO: 2  
 47 <211> LENGTH: 14  
 48 <212> TYPE: PRT  
 49 <213> ORGANISM: Artificial  
 51 <220> FEATURE:  
 52 <223> OTHER INFORMATION: sequence of TN14003  
 55 <220> FEATURE:  
 56 <221> NAME/KEY: MISC\_FEATURE  
 57 <222> LOCATION: (3)..(3)  
 58 <223> OTHER INFORMATION: X = Nal  
 60 <220> FEATURE:  
 61 <221> NAME/KEY: MISC\_FEATURE  
 62 <222> LOCATION: (6)..(6)  
 63 <223> OTHER INFORMATION: X = Cit  
 65 <220> FEATURE:

see pp 1-2, 4, 6

Does Not Comply  
Corrected Diskette Needed

please  
give a  
further description  
(e.g., source of genetic  
material,  
function, etc)

see item 11 on  
Erra summary  
sheet

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/550,525A

DATE: 10/12/2006

TIME: 09:36:42

Input Set : A:\Sequence listing.ST25.txt

Output Set: N:\CRF4\10122006\J550525A.raw

66 &lt;221&gt; NAME/KEY: MISC\_FEATURE

67 &lt;222&gt; LOCATION: (8)..(8)

68 &lt;223&gt; OTHER INFORMATION: X = dLys

70 &lt;220&gt; FEATURE:

71 &lt;221&gt; NAME/KEY: MISC\_FEATURE

72 &lt;222&gt; LOCATION: (12)..(12)

73 &lt;223&gt; OTHER INFORMATION: X = Cit

75 &lt;400&gt; SEQUENCE: 2

W--&gt; 77 Arg Arg Xaa Cys Tyr Xaa Lys Xaa Pro Tyr Arg Xaa Cys Arg

78 1 5 10

81 &lt;210&gt; SEQ ID NO: 3

82 &lt;211&gt; LENGTH: 18

83 &lt;212&gt; TYPE: PRT

84 &lt;213&gt; ORGANISM: Artificial

86 &lt;220&gt; FEATURE:

87 &lt;223&gt; OTHER INFORMATION: sequence of T22

89 &lt;400&gt; SEQUENCE: 3

91 Arg Arg Trp Cys Tyr Arg Lys Cys Tyr Lys Gly Tyr Cys Tyr Arg Lys

92 1 5 10 15

95 Cys Arg

99 &lt;210&gt; SEQ ID NO: 4

100 &lt;211&gt; LENGTH: 21

101 &lt;212&gt; TYPE: DNA

102 &lt;213&gt; ORGANISM: Artificial

104 &lt;220&gt; FEATURE:

105 &lt;223&gt; OTHER INFORMATION: cDNA sequence segments of CXCR4

107 &lt;400&gt; SEQUENCE: 4

108 aataaaatct tcctgcccac c

21

111 &lt;210&gt; SEQ ID NO: 5

112 &lt;211&gt; LENGTH: 21

113 &lt;212&gt; TYPE: DNA

114 &lt;213&gt; ORGANISM: Artificial

116 &lt;220&gt; FEATURE:

117 &lt;223&gt; OTHER INFORMATION: cDNA sequence segments of CXCR4

119 &lt;400&gt; SEQUENCE: 5

120 aaggaagctg ttggctgaaa a

21

123 &lt;210&gt; SEQ ID NO: 6

124 &lt;211&gt; LENGTH: 19

125 &lt;212&gt; TYPE: DNA

126 &lt;213&gt; ORGANISM: Artificial

128 &lt;220&gt; FEATURE:

129 &lt;223&gt; OTHER INFORMATION: CXCR4 cDNA target sequence

131 &lt;400&gt; SEQUENCE: 6

132 taactacacc gaggaatg

19

135 &lt;210&gt; SEQ ID NO: 7

136 &lt;211&gt; LENGTH: 19

137 &lt;212&gt; TYPE: DNA

138 &lt;213&gt; ORGANISM: Artificial

140 &lt;220&gt; FEATURE:

RAW SEQUENCE LISTING                      DATE: 10/12/2006  
 PATENT APPLICATION: US/10/550,525A              TIME: 09:36:43

Input Set : A:\Sequence listing.ST25.txt  
 Output Set: N:\CRF4\10122006\J550525A.raw

```

141 <223> OTHER INFORMATION: CXCR4 cDNA target sequence
143 <400> SEQUENCE: 7
144 tcttcttaac tggcattgt                                     19
147 <210> SEQ ID NO: 8
148 <211> LENGTH: 19
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial
152 <220> FEATURE:
153 <223> OTHER INFORMATION: CXCR4 cDNA target sequences
155 <400> SEQUENCE: 8
156 tctttgccaa cgtcagtga                                     19
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 19
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial
164 <220> FEATURE:
165 <223> OTHER INFORMATION: CXCR4 cDNA target sequences
167 <400> SEQUENCE: 9
168 gtttcagcac atcatgggt                                     19
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 19
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial
176 <220> FEATURE:
177 <223> OTHER INFORMATION: CXCR4 cDNA target sequence
179 <400> SEQUENCE: 10
180 catcatgggt ggccttatac                                     19
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 19
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial
188 <220> FEATURE:
189 <223> OTHER INFORMATION: CXCR4 cDNA target sequences
191 <400> SEQUENCE: 11
192 tcctgcctgg tattgtcat                                     19
195 <210> SEQ ID NO: 12
196 <211> LENGTH: 19
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial
200 <220> FEATURE:
201 <223> OTHER INFORMATION: CXCR4 cDNA target sequences
203 <400> SEQUENCE: 12
204 tcctgtcctg ctattgcat                                     19
207 <210> SEQ ID NO: 13
208 <211> LENGTH: 19
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial
212 <220> FEATURE:
213 <223> OTHER INFORMATION: CXCR4 cDNA target sequences

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/550,525A

DATE: 10/12/2006

TIME: 09:36:43

Input Set : A:\Sequence listing.ST25.txt

Output Set: N:\CRF4\10122006\J550525A.raw

215 <400> SEQUENCE: 13  
 216 gcatcgactc cttcaccct 19  
 219 <210> SEQ ID NO: 14  
 220 <211> LENGTH: 19  
 221 <212> TYPE: DNA  
 222 <213> ORGANISM: Artificial  
 224 <220> FEATURE:  
 225 <223> OTHER INFORMATION: CXCR4 cDNA target sequences  
 227 <400> SEQUENCE: 14  
 228 ggaaagcgag gtggacatt 19  
 231 <210> SEQ ID NO: 15  
 232 <211> LENGTH: 25  
 233 <212> TYPE: DNA  
 234 <213> ORGANISM: Artificial  
 236 <220> FEATURE:  
 237 <223> OTHER INFORMATION: siRNA what is its source?  
 239 <400> SEQUENCE: 15  
 240 aauaaaauccu uccugccac cdttdt 25  
 243 <210> SEQ ID NO: 16  
 244 <211> LENGTH: 25  
 245 <212> TYPE: DNA  
 246 <213> ORGANISM: Artificial  
 248 <220> FEATURE:  
 249 <223> OTHER INFORMATION: siRNA  
 251 <400> SEQUENCE: 16  
 252 aaggaagcug uggcugaaa adtdt 25  
 255 <210> SEQ ID NO: 17  
 256 <211> LENGTH: 20  
 257 <212> TYPE: DNA  
 258 <213> ORGANISM: Artificial  
 260 <220> FEATURE:  
 261 <223> OTHER INFORMATION: CXCR4-specific primers  
 263 <400> SEQUENCE: 17  
 264 gaacctgtt tccgtgaaga 20  
 267 <210> SEQ ID NO: 18  
 268 <211> LENGTH: 20  
 269 <212> TYPE: DNA  
 270 <213> ORGANISM: Artificial  
 272 <220> FEATURE:  
 273 <223> OTHER INFORMATION: CXCR4-specific primers  
 275 <400> SEQUENCE: 18  
 276 cttgtccgtc atgcttctca 20  
 279 <210> SEQ ID NO: 19  
 280 <211> LENGTH: 20  
 281 <212> TYPE: DNA  
 282 <213> ORGANISM: Artificial  
 284 <220> FEATURE:  
 285 <223> OTHER INFORMATION: primer  
 287 <400> SEQUENCE: 19

RAW SEQUENCE LISTING                      DATE: 10/12/2006  
PATENT APPLICATION:    US/10/550,525A              TIME: 09:36:43

Input Set : A:\Sequence listing.ST25.txt  
Output Set: N:\CRF4\10122006\J550525A.raw

```
288 gacaggatgc agaaggagat                      20
291 <210> SEQ ID NO: 20
292 <211> LENGTH: 20
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial
296 <220> FEATURE:
297 <223> OTHER INFORMATION: primer
299 <400> SEQUENCE: 20
300 tgcttgctga tccacatctg                      20
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/550,525A

DATE: 10/12/2006

TIME: 09:36:44

Input Set : A:\Sequence listing.ST25.txt

Output Set: N:\CRF4\10122006\J550525A.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0

L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0



RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/550,525A

DATE: 10/12/2006  
TIME: 09:36:44

Input Set : A:\Sequence listing.ST25.txt  
Output Set: N:\CRF4\10122006\J550525A.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 3, 8, 12  
Seq#:2; Xaa Pos. 3, 8, 12

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20